

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: :
Jaussaud, Dave et. al. :
Serial No. 10/054,041 : Art Unit: 1725
Filing Date: Jan. 22, 2002 : Examiner: Ildebrando,
Christina
Attorney Docket No. P-1084 :
For: PROCESS FOR PRODUCTION :
OF MOLECULAR SIEVE :
ADSORBENT BLENDS :

MAIL STOP NON-FEE AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Affidavit Under 37 CFR 1.132

Dr. Armin Pfenninger, being duly sworn, does hereby depose
and say as follows:

1. That I received a Doctor's degree in
Chemistry from University of Berne on the
_____ of July, 1978.

2. That I am co-inventor of patent application Serial No.
10/054,041 filed on January 22, 2002, entitled "PROCESS FOR
PRODUCTION OF MOLECULAR SIEVE ADSORBENT BLENDS".

3. That I have been employed by CU Chemie Uetikon AG, in
Uetikon, Switzerland since 1979, and that my position is the
Head of R&D for zeolites. (Zeochem, LLC, the assignee of this
application, is substantially owned by CU Chemie Uetikon AG.)

4. That I have reviewed a series of photographs which compared (a) a blend of a conventional attapulgite clay, MIN-U-GEL® 400, from ITC Floridian with molecular sieve crystals obtained from Zeochem, with (b) a blend of a highly dispersed attapulgite clay provided by ITC Floridian with the same molecular sieve crystals. The ratio of the attapulgite to the molecular sieve in the blends shown in both photographs was 1% attapulgite to 99% molecular sieve, by weight.

5. Attached as Exhibit A is a photograph showing the blend of MIN-U-GEL® 400 attapulgite with molecular sieve crystals at 2000 times magnification. As is clear from this photograph, virtually the only material that is shown comprises molecular sieve crystals. Virtually the only attapulgite clay that is shown is a dense clump of undispersed attapulgite clay in the top right hand corner of the photograph, marked with a circle. There are virtually no dispersed attapulgite fibers anywhere in this photograph.

6. Attached as Exhibit B is a photograph also at 2000 times magnification showing the 1% blend of the highly dispersed attapulgite clay with the same molecular sieve crystals. In contrast to Exhibit A, the attapulgite fibers are highly dispersed and are present throughout the blend. Individual fibers of attapulgite extend between the individual molecular sieve crystals and are attached to virtually every molecular

sieve crystal. This picture clearly shows highly dispersed attapulgite clay.

7. I have also reviewed U.S. Patent Number 5,413,978 and EP 0 940 174. Neither of these patents provides any indication that the disclosed attapulgite clays are highly dispersed. In contrast, each discloses conventional attapulgite clay, similar to the MIN-U-GEL® attapulgite clay disclosed in the Exhibit A photograph.

8. From this information, it is my opinion that there is no disclosure in either U.S. Patent No. 5,413,978 or EPO 0 940 174 that would suggest or teach to a person skilled in the art to substitute a highly dispersed attapulgite clay, such as is shown in Exhibit B, for the conventional attapulgite clay shown in Exhibit A.

Further, Affiant sayeth naught.

A. Pfenninger
Dr. Armin Pfenninger

STATE OF KENTUCKY)
)
COUNTY OF JEFFERSON)

Subscribed and sworn to by Dr. Armin Pfenninger, before me
this 25th day of July, 2003.

Sandra L. Olivier
Notary Public, State at Large, KY

My commission expires: 1-23-06.